



## UNITED STATES DEPARTMENT OF COMMERCE

## Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

YOUNG & THOMPSON  
745 SOUTH 23RD STREET 2ND FLOOR  
ARLINGTON VA 22202

MULLEN, T

ART UNIT

PAPER NUMBER

2736

DATE MAILED:

08/18/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.	09/341093	Applicant(s)	Horne et al.
Examiner	Mullen	Group Art Unit	2736

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- Responsive to communication(s) filed on \_\_\_\_\_.
- This action is FINAL.
- Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- Claim(s) 1-8 and 10 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- Claim(s) \_\_\_\_\_ is/are allowed.
- Claim(s) 1-8 and 10 is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
- received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

### Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). 6  Interview Summary, PTO-413
- Notice of References Cited, PTO-892  Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948  Other \_\_\_\_\_

## Office Action Summary

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1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
3. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines one-and-one-half or double spaced on good quality paper are required.
4. The disclosure is objected to because of the following informalities:
  - page 3, line 31, "embrace recognition any or all of" is vague;
  - page 5, line 2, "recognised" should be --recognise--;
  - page 5, line 24, "feature" should be --be featured--;
  - page 7, line 13, after "shows", either "a" or "the" should be deleted;
  - page 7, line 23 and page 14, line 12, it is unclear what is meant by "Figures 20/2.2 through 20/5.5", i.e. there are no figures in the drawings corresponding to these figure numbers;
  - page 8, line 28, before "version", either "a" or "the" should be deleted;
  - page 9, line 24, after "implemented" should be --as-- or --by--;
  - page 13, line 20, "base" should be --based--;
  - page 14, lines 2-3, "a three-tiered sleepiness warning threshold levels" is vague; and it is unclear if the "Literature References" listed on pp. 14-15 are intended to be cited prior art (in which case they need to be provided in a separate listing from the specification) or are actually considered part of applicant's disclosure (in which case they are not properly incorporated by reference).

Appropriate correction is required.

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5. Headings are required in the specification, in accordance with 37 CFR 1.77(b).
6. The drawings are objected to because it is unclear what element is being depicted by the unnumbered blank box in the middle of Fig. 1; boxes 13, 15 and 27 in Fig. 1, and 33 in Fig. 13C, should be provided with “descriptive legends” in accordance with 37 CFR 1.84(o); and, as alluded to on attached form PTO-948, the inclusion of Tables 1-24 on pages 19-30 of the drawings is improper (some of these tables also appear on pages 10, 12, 13, 14, 16 and 17 of the drawings, and should be deleted therefrom as well). Generally speaking, information presented in the form of a table should appear in the specification rather than in the drawings. Correction is required.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “memory” and “computational means” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

It is considered that at least a block diagram or flow chart showing the interconnections or communication between the memory and/or computational means and the various sensors (13,15, 27,29,31,33), display screen (18), loudspeaker (21), microphone (23), etc. is necessary for an adequate showing of the claimed invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards

as the invention.

In claim 1, lines 3-5, “a sensor...for registering a vehicle or machine condition factor and attendant control action” is vague as to what is actually being sensed; i.e., it is unclear what is meant by a sensor “registering” a condition, and it is unclear what condition(s) may be implied by “vehicle or machine condition factor and attendant control action”, in particular it is unclear what is meant by a “conditon factor” or a “control action”.

In claim 1, it is unclear if the “physiological reference model, of circadian rhythm pattern” (lines 8-9) is considered part of the “registered condition, history or action” (line 14) used to weight the operating model (note that a “condition”, “action” and “history” are previously recited on lines 4-6 respectively), and thus whether the physiological model/circadian rhythm pattern is used in making the determination of “driver or operator sleepiness” (last line).

In claim 2, it is unclear if “vehicle steering wheel movement” and “attendant directional control” refer to two different conditions sensed by the sensor (line 3), or are these phrases in combination merely describing a single condition

In claim 3, it is unclear how the computational means “determin(es) the character of the route being driven”.

In each of claims 7-8, it is unclear if the “input” on line 3 is the same or different element as the “input” recited at claim 1, line 6.

9. Claims 1-8 and 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saitoh et al, Kawakami et al and Bouchard et al are the US equivalents to the foreign art cited by applicant. Brainard (Figs. 5-6) is cited to further show the state of the art.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Mullen whose telephone number is (703) 305-4382. The examiner can normally be reached on Mon-Thur from 6:30AM to 4:00PM. The examiner can also be reached on alternate Fridays (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on (703) 305-4717.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 308-9051 (for formal communications intended for entry)

**Or:**

(703) 308-6743 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

T. Mullen  
August 16, 2000

*Thomas J. Mullen Jr.*  
Thomas J. Mullen, Jr.  
Primary Examiner  
Art Unit 2736